IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 44 and ADD new claims 46-49 as set forth below:

1. (PREVIOUSLY PRESENTED) A method of managing metadata in a metadata transmission server, comprising:

generating a plurality of metadata fragment data by partitioning metadata to be transmitted based upon a predetermined semantic unit;

selecting a predetermined metadata fragment data from among the plurality of metadata fragment data;

generating, using a processor, metadata-related information using the selected metadata fragment data; and

transmitting a container including the selected metadata fragment data, the metadata-related information, and a header including data format information indicating a data format type of the selected metadata fragment data,

wherein the metadata-related information comprises values obtained by substituting the selected metadata fragment data into a unidirectional function, which function varies depending on the data format type indicated in the header.

2. (ORIGINAL) The method of claim 1, wherein the selected metadata fragment data, the metadata-related information, and the data format information of the selected metadata fragment data are transmitted in a metadata container.

3. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the data format information indicates whether the selected metadata fragment data has a binary XML format or a text XML format, and each container includes metadata fragment data having only one of a binary XML format and a text XML format.

4. (CANCELLED)

5. (ORIGINAL) The method of claim 2, wherein a metadata authentication level flag specifying a metadata authentication level is further contained in the metadata container.

6. (ORIGINAL) The method of claim 1, wherein the metadata-related information is metadata digest information obtained by substituting the selected metadata fragment data into a unidirectional function.

7. (ORIGINAL) The method of claim 6, wherein the unidirectional function is a hash function.

8. (ORIGINAL) The method of claim 2 further comprising:

generating metadata authentication signature information using the metadata-related information and a first encryption key; and

inserting the metadata authentication signature information in the metadata container containing the selected metadata fragment data.

9. (ORIGINAL) The method of claim 8, wherein the metadata authentication signature information is obtained by substituting the metadata-related information and the first encryption key into a unidirectional function.

10. (ORIGINAL) The method of claim 9, further comprising:

encrypting the first encryption key using a second encryption key; and

inserting the encrypted first encryption key into the metadata container containing the selected metadata fragment data.

11. (ORIGINAL) The method of claim 2, wherein the plurality of metadata fragment data and corresponding metadata-related information are inserted into the metadata container, and each metadata fragment data and the corresponding metadata-related information are connected to each other by pointer information.

12. (ORIGINAL) The method of claim 8, wherein the plurality of metadata fragment data and corresponding metadata-related information and metadata authentication signature information are inserted into the metadata container, and each metadata fragment data and the

corresponding metadata-related information and metadata authentication signature information are connected to one another by pointer information.

13-43. (CANCELED)

44. (CURRENTLY AMENDED) A method of managing metadata ~~in a metadata transmission server~~, the method comprising:

generating, using a processor, a plurality of metadata fragment data by partitioning metadata to be transmitted based upon a predetermined semantic unit having a predetermined meaning;

selecting a predetermined metadata fragment data from among the plurality of metadata fragment data;

generating metadata digest information by substituting the selected metadata fragment data into a unidirectional function; and

transmitting, using a metadata transmission server, a metadata container including the selected metadata fragment data, the metadata digest information, and a header including data format information indicating a data format type of the selected metadata fragment data,

wherein the ~~metadata-related information comprises values obtained by substituting the selected metadata fragment data into a unidirectional function, which~~unidirectional function varies depending on the data format type indicated in the header; and

receiving the metadata container in a metadata receiving client, the client identifying a format of the metadata fragment data using the data format information in the header and using the identified format to determine whether an authentication signature is valid based upon the selected metadata fragment data and the metadata digest information.

45. (PREVIOUSLY PRESENTED) A method of managing metadata in a metadata transmission server, comprising:

generating, using a processor, a plurality of metadata fragment data by partitioning metadata to be transmitted based upon a predetermined semantic unit having a predetermined meaning;

selecting a predetermined metadata fragment data from among the plurality of metadata fragment data;

generating metadata container-level authentication message digest information by substituting the selected metadata fragment data into a unidirectional function; and

transmitting a metadata container-level authentication container including the selected metadata fragment data, the metadata container-level authentication message digest information, and a header including data format information indicating a data format type of the selected metadata fragment data, wherein the data format information is used to determine whether the generated metadata digest information is valid.

46. (NEW) The method of claim 44, wherein in the metadata receiving client, an algorithm used by the unidirectional function in the generating of the metadata digest information is identified by reading the data format information.

47. (NEW) The method of claim 46, wherein in the metadata receiving client, the selected metadata fragment data and the metadata digest information are read from the metadata container, and local metadata digest information is generated using the identified algorithm.

48. (NEW) The method of claim 47, wherein in the metadata receiving client, the metadata transmitted by the metadata content provider is authenticated by comparing the metadata digest information read from the metadata container and the local metadata digest information generated by the metadata receiving client.

49. (NEW) The method of claim 47, wherein the metadata transmitted by the metadata content provider is determined as authenticated by the metadata receiving client when the metadata digest information read from the metadata container and the local metadata digest information generated by the metadata receiving client are identical.